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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,880

08/28/2006

David Graham Powley

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25944 7590 09/24/2008

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

CYGAN, MICHAEL T

ART UNIT

PAPER NUMBER

2855

MAIL DATE

DELIVERY MODE

09/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,880	Applicant(s) POWLEY ET AL.	
	Examiner Michael Cygan	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/08/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by McMurtry (US 5,189,806). McMurtry discloses the claimed invention, a method for scanning an object with a surface measurement probe mounted on a coordinate positioning machine, the probe having a definable servo direction vector, the method comprising the steps of: using translational movement of the coordinate positioning machine to move the probe along an at least part nominally spiral path about an axis which intersects the object; wherein the servo direction vector for the probe is directed nominally towards the axis of the at least part nominally spiral path; and wherein the servo direction vector for the probe is at an angle to said axis of the nominally spiral path and at an angle to a plane perpendicular to said axis of the at least part nominally spiral path, where the object may have an unknown surface profile and/or a free-form

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surface, where the probe is moved parallel to the direction of the probe surface direction vector to control probe deflection and/or probe offset, where a contact or non-contact probe is used, where the probe is rotated to keep its line of sight perpendicular to the direction of the servo direction vector of the probe, where motion is achieved by defining a second axis along which the probe servo direction vector is parallel, said second axis being at an angle to said axis which intersects the object, rotating the second axis for an at least part revolution about the first axis and translating the second axis which intersects the surface of the object to be measured in a direction parallel to the first axis, moving the surface measurement probe to keep it on the axis, where the angle between the probe direction vector and the axis which intersects the object is varied during the scan. McMurtry further discloses an apparatus comprising a surface measurement probe mounted on a coordinate positioning machine, said coordinate positioning machine having drive means to enable the probe to be driven translationally in several axes; a controller which controls said drive means to move the probe along an at least part nominally spiral path about an axis which intersects said object; wherein the controller controls the drive means such that the servo direction vector of the probe is directed nominally towards the centre of said axis of the at least part nominally spiral path; and wherein the controller controls the drive means such that the servo direction vector of the probe is at an angle to said axis of the at least part nominally spiral path and at an angle to a plane perpendicular to said of the at least part nominally spiral path. See entire document, especially column 3 lines 5-10 detailing spiral or circular motion of the probe, column 3 lines 51-55 detailing pivoting for urging contact, column 1

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line 61 through column 2 line 4 for contact and noncontact probes. Note that a geometrical construct (such as a spiral path) has a plurality of axes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over McMurtry (US 5,189,806). McMurtry teaches the claimed invention except for a 45 angle of the servo direction vector of the probe. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a 45 degree angle, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *see also KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is (571) 272-2175. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Cygan, Ph.D., J.D./
Primary Examiner, Art Unit 2855